

Certificate of Analysis

Print Date: Apr 4th 2024

www.tocris.com

Product Name: Pam2CSK4 Catalog No.: 4637 Batch No.: 10

CAS Number: 868247-72-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{65}H_{126}N_{10}O_{12}S$

Batch Molecular Weight: 1271.83

Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 1 mg/ml in 0.25% acetic acid

Storage: Store at -20°C

Peptide Sequence: Cys(Pam₂)-Ser-Lys-Lys-Lys

2. ANALYTICAL DATA

HPLC: Shows 99.4% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys	4.00	4.03
Arg			Met		
Asx			Phe		
Cys	1.00	Detected	Pro		
Glx			Ser	1.00	0.97
Gly			Thr		
His			Trp		
lle			Tyr		
Leu			Val		

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

Print Date: Apr 4th 2024

www.tocris.com

Product Name: Pam2CSK4 Catalog No.: 4637 10

CAS Number: 868247-72-7

Description:

Pam2CSK4 is a toll-like receptor 2/6 (TLR2/6) agonist. Induces TNF- α production in human mononuclear cells. Also induces proliferation and activation of mouse splenic B cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₆₅H₁₂₆N₁₀O₁₂S Batch Molecular Weight: 1271.83

Physical Appearance: White lyophilised solid

Peptide Sequence:

Cys(Pam2)-Ser-Lys-Lys-Lys-Lys

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in 0.25% acetic acid

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 μ m filter to remove potential bacterial contamination whenever possible.

References:

Boeglin *et al* (2011) Toll-like receptor agonists synergize with CD40L to induce either proliferation or plasma cell differentiation of mouse B cells. PLoS One *6* e25542. PMID: 21991317.

Schromm *et al* (2007) Physiochemical and biological analysis of synthetic bacterial lipopeptides: validity of the concept of endotoxic conformation. J.Biol.Chem. **282** 11030. PMID: 17308304.

Omueti et al (2005) Domain exchange between human Toll-like receptors 1 and 6 reveals a region required for lipopeptide discrimination, J.Biol.Chem. 280 36616, PMID: 16129684.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use